DOW CORNING

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December 27, 1996

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TSCA Document Processing Center (7407)
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
Attn: TSCA Section 8(e) Coordinator
401 M Street S.W.
Washington, D.C. 20460

Contains No CBI

Re: TSCA Section 8(e) Notification of Substantial Risk
DOW CORNING® 3-8015 Intermediate

Dear Sir:

In accordance with the provisions of Section 8(e) of the Toxic Substances and Control Act (TSCA). as interpreted in the Statement of Interpretation and Enforcement Policy (40 FR 11110, March 16, 1978), Dow Corning is submitting the following information as a Notification of Substantial Risk.

Test Material:

The test substance, DOW CORNING® 3-8015 Intermediate, is a solution of platinum 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes (CASRN 68478-92-2, 1.5 weight percent) in a mixture of 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane (CASRN 2627-95-4, 5 weight percent) and vinyl group-terminated di-Me siloxanes (CASRN 68083-19-2, 93 weight percent).

Manufacturer:

Dow Corning Corporation
2200 West Salzburg Road
Midland, Michigan 48686-0994

Submitted Study:

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

Dow Corning Corporation
1996-I0000-42261
October 30, 1996

Executive Summary:

A guinea pig sensitization study was conducted to determine the dermal sensitization potential of DOW CORNING® 3-8015 Intermediate. This study was performed according to the OECD Guidelines No. 406 (July, 1992) and U.S. EPA Good Laboratory Practice Standards Part 792 (TSCA), 40 CFR 792, Final Rule, August, 1989. The test material was administered by intradermal (i.d.) injection of the dosing formulation (5% w/v) in DOW CORNING® 360 Medical Fluid to the shaved shoulder region of 20 male guinea pigs. Another group of 10 male vehicle control guinea pigs was handled in a similar manner, but was treated (i.d.) with DOW CORNING® 360 Medical Fluid only. A third group of 10 male guinea pigs was treated with dinitrochlorobenzene (DNCB) in propylene glycol and served as a positive control. One week following i.d. injection of the first induction dose, a second induction dose of undiluted (100%) test material was applied topically to the test group animals for 48 hours. Animals in the vehicle control and positive control groups were dosed topically with DOW CORNING® 360 Medical Fluid and DNCB, respectively. Three weeks following the first induction dose, test and vehicle control guinea pigs received a topical challenge dose (75% w/v) of test material/ DOW CORNING® 360 Medical Fluid formulation for 24 hours. Positive control guinea pigs were dosed similarly with 0.1% DNCB in propylene glycol. A second challenge was performed one week following the first challenge and a 50% (w/v) test material/ vehicle formulation was applied to the test and vehicle control animals. The skin response of all guinea pigs was evaluated at approximately 24 and 48 hours following completion of the challenge dose. The results were expressed in terms of the incidence and severity of the skin response.

All of positive control animals exhibited a positive reaction at the DNCB challenge control site with a severity index of 3.40. A positive response was observed in 1 of 10 (10%) vehicle control group animals. A positive response in the test substance-treated animals resulted in incidence and severity of 50% and 1.10, respectively, at the forty-eight hour scoring interval following the second challenge dose.

Actions:

For purposes of notification of substantial risk under TSCA Section 8(e), the general INTERNAL designation on the attached health and safety study is waived by Dow Corning.

If you have any questions concerning this study, please contact Dr. Waheed Siddiqui , Associate Toxicology Scientist, Product Safety and Toxicology Department, at 517-496-4884 or at the address provided herein. If you require further general information regarding this submission, please contact Dr. Rhys G. Daniels, Regulatory Compliance Specialist, Product Stewardship and Regulatory Compliance Department, at 517-496-4222 or at the address provided herein.

Sincerely,

Patrick W Langwardt for

Michael P. Hill
U.S. Area Vice President
Director of Health and Environmental Sciences
(517) 496-4059

RGD96227

DOW CORNING CORPORATION
HEALTH & ENVIRONMENTAL SCIENCES
TECHNICAL REPORT

IIT RESEARCH INSTITUTE
LIFE SCIENCES DEPARTMENT
10 W. 35TH STREET
CHICAGO, IL 60616

Report No: 1996-10000-42261

Title: SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

Study No: 8445

External Testing Facility No: L08573-24

Test Substance: Dow Corning® 3-8015 Intermediate (Platinum #2)

Study Director: John Findlay, B.S.
Research Toxicologist

Author(s): John Findlay, B.S.
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Sr. Technical Editor

Sponsor: Dow Corning Corporation
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Midland, MI 48686-0994

Sponsor Representative: Waheed Siddiqui, Ph.D.
Associate Toxicology Scientist

Testing Facility: IIT Research Institute
Life Sciences Department
10 West 35th Street
Chicago, IL 60616-3799

Study Completion Date: October 30, 1996

Security Classification: This report may be reproduced and shared with any Dow Corning employee. Distribution outside the corporation must be approved by the Director of H.E.S. When this INTERNAL report is no longer needed, it may be placed in office waste baskets for destruction.

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Guinea Pig Maximization Test of Dow Corning® 3-8015 Intermediate (Platinum #2)

ABSTRACT

The purpose of this study was to determine the dermal sensitization potential of Dow Corning® 3-8015 Intermediate (Platinum #2) in guinea pigs using the Guinea Pig Maximization Test (GPMT).

Dow Corning® 3-8015 Intermediate (Platinum #2) was administered by intradermal (i.d.) injection of dosing formulation in Dow Corning® 360 Medical Fluid to the shaved shoulder region of twenty male guinea pigs. Another group of ten male vehicle control guinea pigs was handled in a similar manner, but was treated i.d. with Dow Corning® 360 Medical Fluid only. A third group of ten male guinea pigs was treated i.d. with DNCB in propylene glycol and served as a positive control. One week following injection of the first induction dose, a second induction dose of test substance was applied topically to the test group for 48 hours. Animals in the vehicle control and positive control groups were dosed (topical application) with Dow Corning® 360 Medical Fluid and DNCB, respectively. Three weeks following the first induction dose, test and vehicle control guinea pigs received a topical challenge dose of test substance/Dow Corning® 360 Medical Fluid formulation for 24 hours. Positive control guinea pigs were similarly dosed with DNCB in propylene glycol. A second challenge was performed one week later in order to confirm the results of the first challenge. All guinea pigs were scored for erythema and edema according to the Draize scale approximately 24 and 48 hours following completion of each challenge dose. The results of the challenge were expressed in terms of the incidence and severity of the skin response, with an erythema and/or edema score of 1 or greater being considered a positive response. This study was performed using OECD Guidelines for Testing of Chemicals (Part 406, July, 1992) and according to U.S. EPA Good Laboratory Practice Standards set forth in Part 792 (TSCA) of Title 40 of the *Code of Federal Regulations*, Final Rule, August 17, 1989.

All of the positive control animals exhibited a positive reaction at the DNCB challenge site. A positive skin sensitization response was observed in 1 of 10 (10%) vehicle control group animals. At the second challenge, 48-hour scores resulted in 10 out of 20 (50%) test-substance-treated animals exhibiting a positive reaction. Therefore, according to the modified scoring rating of Kligman (Kligman, A.M., *J. Invest. Dermatology*, 1966), Dow Corning® 3-8015 Intermediate (Platinum #2) is considered a moderate skin sensitizer in guinea pigs.

GLP COMPLIANCE STATEMENT

This study was conducted in accordance with U.S. Environmental Protection Agency (EPA) TSCA Good Laboratory Practice (GLP) Standards as set forth in the *Code of Federal Regulations* (Part 792 Title 40), except that no analyses were performed to determine the concentration, homogeneity and stability of the test substance or control dosing formulations. The positive control substance, saline and propylene glycol vehicles, and Freund's Complete Adjuvant were purchased substances and were considered characterized by their vendor-provided documentation; reserve samples were not retained. Records pertaining to the characterization of the bulk test substance and Dow Corning® 360 Medical Fluid vehicle were the responsibility of the Sponsor and are maintained at the address indicated for the Sponsor. The raw data have been reviewed by the Study Director, who certifies that the information contained in this report is consistent with and supported by the study raw data.

John Findlay 10/30/96

John Findlay, B.S. Date
Study Director
Life Sciences Department

QUALITY ASSURANCE STATEMENT

Study Title: Skin Sensitization Study of Dow Corning® 3-8015 Intermediate (Platinum #2) Using the Guinea Pig Maximization Test (GPMT)

Project Number: L08573

Study Number: 24

Study Director: John Findlay, B.S.

This study has been subjected to inspections and the report has been audited by the IITRI Quality Assurance Unit in accordance with U.S. Environmental Protection Agency (EPA) "Good Laboratory Practice (GLP) Standards" - "CFR Title 40 Section 792.35". The report describes the methods and procedures used in the study and the reported results accurately reflect the raw data of the study.

The following are the inspection dates and the dates inspection findings were reported:

		Findings Reported To:	
Date of Inspection	Phase Inspected	Study Director	Management
April 4, 1996	Protocol	April 4, 1996	April 4, 1996
April 30, 1996	Test substance preparation	April 30, 1996	April 30, 1996
May 6, 1996	Test system preparation	May 6, 1996	May 6, 1996
May 23, 1996	Scoring	May 23, 1996	May 23, 1996
May 28, 1996	Test substance application	May 28, 1996	October 17, 1996
July 31 and August 2, 1996	Report	August 2, 1996	August 2, 1996
October 16, 1996	Report	October 17, 1996	October 17, 1996

R. A. Boyne 10-30-96

Ronald A Boyne, B.S. Date
Manager, Quality Assurance

Guinea Pig Maximization Test of Dow Corning® 3-8015 Intermediate (Platinum #2)

APPROVAL SIGNATURES

This report consists of Pages 1 through 26 including Tables 1 through 2 and Appendices 1 through 5.

John Findlay — 10/30/96

John Findlay, B.S.
Research Toxicologist
Life Sciences Department
Study Director

Date

David McCormick/MD — 10/30/96

David McCormick, Ph.D., D.A.B.T.
Manager, Toxicology and Carcinogenesis
Life Sciences Department

Date

W Siddiqui — 10/28/96

Waheed Siddiqui, Ph.D.
Associate Toxicology Scientist
Sponsor Representative

Date

Guinea Pig Maximization Test of Dow Corning® 3-8015 Intermediate (Platinum #2)

STUDY INFORMATION

Study Initiation Date:	April 18, 1996
Experimental Start Date:	April 30, 1996
Experimental Termination Date:	May 31, 1996
Study Completion Date:	October 30, 1996
Study Director:	John Findlay, B.S.
Sponsor:	Dow Corning Corporation
Sponsor Representative:	Waheed Siddiqui, Ph.D.
Study Personnel:	Lucy Touma-Youakim, M.S., Laboratory Toxicologist Melissa Luther, B.S., Laboratory Toxicologist
Report Preparation:	J. Fred Krueger, M.S., Senior Technical Editor

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

I. INTRODUCTION

The purpose of this study was to determine the dermal sensitization potential of Dow Corning® 3-8015 Intermediate (Platinum #2) in guinea pigs using the Guinea Pig Maximization Test (GPMT). Dermal application of the test substance corresponds to a potential route of human exposure.

II. MATERIALS AND METHODS

A. Test and Control Substances: Dow Corning® 3-8015 Intermediate (Platinum #2), Reference/Lot No. BD075018, was received October 27, 1995. The test substance was a clear, pale yellow liquid and was stored at room temperature in the original container. The Material Safety Data Sheet (MSDS) indicated that the test substance is stable. All chemical analyses and attendant documentation pertaining to the characterization of the bulk test substance and vehicle (Dow Corning® 360 Medical Fluid) were the responsibility of the Sponsor. Residual test substance will be returned to the Sponsor upon completion of the study. Characterization of the 0.9% saline (0.9% Sodium Chloride Injection, USP), positive control substance (1-chloro-2,4-dinitrobenzene; DNCB), Freund's Complete Adjuvant (FCA), sodium lauryl sulfate (SLS) and propylene glycol (PG) were provided by the vendors.

B. Dosage Formulations: The following were used to prepare the dosing formulations used in this study: (1) the test substance (TS); (2) Dow Corning® 360 Medical Fluid (Lot No. HH054998); (3) FCA (Sigma Immunochemicals, St. Louis, MO; Lot No. 084H8800); (4) DNCB (Aldrich Chemical Co., Milwaukee, WI; Lot No. 12423MZ); (5) 0.9% saline (Baxter Healthcare Corp, Deerfield, IL; Lot No. C293399); (6) 10% SLS (J.T. Baker, Inc., Phillipsburg, NJ; Lot No. J34700) in Milli-"Q" water, and (7) PG (J.T. Baker, Inc.; Lot No. G48608). The animals were dosed with one or more of the following formulations: 5% (w/v) TS in Dow Corning® 360 Medical Fluid, undiluted TS, 75% (w/v) TS in Dow Corning® 360 Medical Fluid, 50% (w/v) TS in Dow Corning® 360 Medical Fluid, 0.9% saline in FCA (1:1), 5% (w/v) TS in FCA and saline, undiluted Dow Corning® 360 Medical Fluid, 5% (w/v) Dow Corning® 360 Medical Fluid in FCA and 0.9% saline (1:1), 0.1% DNCB in propylene glycol, 0.1% DNCB in FCA and 0.9% saline

(1:1), undiluted PG, and 10% SLS in Milli-"Q" water. Dosing formulations were prepared at five separate times: (1) for preliminary range-finding studies; (2) for the first (intradermal) induction; (3) for the second (topical) induction; and, (4) for the challenge dosing. The preliminary range-finding test evaluated several concentrations of TS by topical (Appendix 3) and intradermal application; a 5% solution was found to be the optimal concentration for the first (intradermal) induction, undiluted (100%) TS for the second induction, 75% concentration for the first challenge, and 50% for the second challenge.

C. Animals: Male Hartley guinea pigs, approximately 3 weeks of age were received from Sasco, Inc., Madison, WI on April 10, 1996. A random sample (21 of 160 pigs received) weighed between 210 and 276 g the following day. Upon arrival, the animals were held in quarantine for at least two weeks and examined carefully to ensure their health and suitability as test subjects. Guinea pigs selected for the study were identified by a uniquely numbered metal tag inserted through the pinna of the right ear and by a cage card bearing the corresponding identification number.

D. Food and Water: Certified Purina Guinea Pig Chow #5026 (PMI Feeds, Inc., St. Louis, MO) and City of Chicago water, supplied by means of an automatic watering system, were available *ad libitum*.

E. Housing and Environment: The guinea pigs were housed individually in stainless steel cages measuring 23.9 x 17.8 x 39.8 cm. Absorbent liners were placed in the pan below the stainless steel mesh floor of each animal cage to absorb liquids. During the treatment phase of the study, the animal room was maintained at a temperature range of 22 to 24°C and a relative humidity range of 25 to 72%. Fluorescent lighting was provided for 12 hours followed by 12 hours of darkness.

F. Methods:

1. Animals: Guinea pigs selected for testing were assigned to three groups: a test group of twenty males, a vehicle control group of ten males, and a positive control group of ten males. Group assignments were made using an in-house developed computerized randomization procedure constrained by body weight.

2. Skin Preparation: The guinea pigs were clipped free of hair prior to each induction and before the challenge doses. The animals were also depilated with Neet® Hair

Remover (Reckitt & Colman, Inc., Wayne, NJ) before the 24-hour scoring of the challenge doses.

3. Dosing:

   a. First Induction: On April 30, 1996 (Day 1), the fur over the scapula of each animal in an area of approximately 4 x 6 cm was shaved and six intradermal injections (three pairs) of 0.1 ml of the dosing formulations were made flanking the dorsal midline according to the following scheme:

	Test Substance (N = 20)			Vehicle Control (N = 10)			Positive Control (N = 10)	
	(Left)	(Right)		(Left)	(Right)		(Left)	(Right)
1[a]	TS/V[b]	TS/V	1	V	V	1	DNCB/PG	DNCB/PG
2	saline[c]/FCA	saline/FCA	2	saline/FCA	saline/FCA	2	saline/FCA	saline/FCA
3	TS/FCA/saline	TS/FCA/saline	3	V/FCA/saline	V/FCA/saline	3	DNCB/FCA/saline	DNCB/FCA/saline

[a] = site
[b] V = Vehicle (Dow Corning® 360 Medical Fluid)
[c] saline = 0.9% saline

   b. Second Induction: Dermal sensitization responses are optimized in the presence of local dermal irritation. Since no signs of dermal irritation were observed using several different concentrations of the test substance during the preliminary study, the area over the shoulder region that received the i.d. injections of each animal was shaved and 0.5 ml of a 10% aqueous SLS formulation was applied on Day 7 (May 6, 1996) to induce dermal irritation. On Day 8 (May 7, 1996), the same region of each animal was again shaved and a 2 x 4 cm Webril® Appli-Pad (Kendall Co., Boston, MA) was saturated (1.5 ml) with neat test substance and applied topically over the six injection sites of each test substance-treated animal. Vehicle control animals were similarly dosed with undiluted Dow Corning® 360 Medical Fluid, while positive control animals were similarly dosed with 0.1% DNCB in PG. The animals were then wrapped with an elastic adhesive bandage (Elastoplast®, Beiersdorf, Inc., Norwalk, CT). All wrapping materials were removed 48 hours after application.

   c. First Challenge: On Day 22 (May 21, 1996), two weeks following application of the last induction dose, 0.3 ml of the test substance formulation at a concentration of 75% in Dow Corning® 360 Medical Fluid was applied to the shaved upper left flank and 0.3 ml of undiluted Dow Corning® 360 Medical

Fluid was applied to the shaved upper right flank of each of the twenty test-substance treated guinea pigs. Vehicle control guinea pigs also received a challenge dose of 0.3 ml of the 75% (w/v) test substance/Dow Corning® 360 Medical Fluid formulation applied to the upper left flank and 0.3 ml of undiluted Dow Corning® 360 Medical Fluid applied to the upper right flank. Positive control animals received 0.3 ml of 0.1% DNCB/PG applied to the upper left flank and undiluted (100%) PG applied to the upper right flank. The dosing material for the challenge doses was applied using Hill Top Chambers®, and animals were wrapped with an adhesive bandage (Elastoplast®). All wrapping materials were removed 24 hours after the challenge dose.

d. Second Challenge: On Day 29 (May 28, 1996), one week following the first challenge dosing, a 50% test substance/vehicle formulation was applied to the test substance-treated and vehicle control animals. The methods for the second challenge were identical to those used for the first challenge, except that the Hill Top Chambers® were applied to previously untreated skin on right and left flanks of the animals.

4. Skin Examination: Twenty-four (24) and 48 hours following removal of the wrappings after the challenge doses (Days 24, 25, 31 and 32), the test sites were scored for erythema and edema according to the Draize scale (Appendix 1). To facilitate scoring, all animals were depilated with Neet® Hair Remover (Whitehall Laboratories, Inc., NY) approximately 2 hours before the 24-hour scoring.

5. Observations: All guinea pigs were observed daily for mortality and morbidity during the treatment period of the study.

6. Body Weights: Animals were weighed weekly (*i.e.*, prior to dosing on dosing days).

7. Animal Disposition: After the final observation all guinea pigs were euthanized by carbon dioxide asphyxiation and discarded without necropsy.

G. Evaluation: Results obtained from each of the test substance-exposed animals were compared within the test substance group and between the test substance and vehicle control groups. The results of the challenge were expressed in terms of the incidence and severity of the skin response (*i.e.*, erythema and/or edema scores). An incidence index was calculated at 24 and 48 hours by dividing the number of animals with responses of

a score of 1 or greater by the number of animals tested. The severity index at each scoring interval is the sum of the skin scores divided by the number of animals tested. A comparison of the reactions elicited in terms of incidence, severity, and duration between the vehicle control and treated groups was made to determine whether the test substance induced sensitization. The test substance was then classified according to its allergic potential using the modified scoring rating of Kligman (Appendix 1).

H. Archives: All original data generated at IITRI and the signed final report will be retained in the IITRI Archives (10 W. 35th Street, Chicago, IL 60616) for five years from the date of this report. At that time, the Sponsor will be contacted in order to determine its final disposition.

III. RESULTS

A. Mortality: No deaths occurred during the study.

B. Skin Effects: A summary of the preliminary topical application erythema scores is presented in Appendix 3. Individual erythema and edema scores are presented in Appendix 2, while positive scores (*i.e.*, erythema and/or edema response of 1 or greater) are summarized as incidence and severity indices in Table 1. All of the positive control animals exhibited a positive response at the DNCB challenge site, resulting in incidence and severity indices of 100% and 3.40, respectively, at the 48-hour scoring interval. Following the first challenge, two of 20 test substance-treated animals exhibited positive responses at the 24-hour scoring and ten exhibited positive responses at the 48-hour scoring, resulting in an incidence index of 50% and a severity index of 0.80 at the 48-hour scoring interval. The two animals which had a positive score at the 24-hour scoring interval continued to exhibit positive scores of the same or increased severity at 48 hours. In the vehicle control group following the first challenge, one of ten animals exhibited a positive response at the 48-hour scoring resulting in an incidence index of 10% and a severity index of 0.20. Since the results of the first challenge dose were inconclusive, a second challenge dose was performed.

Following the second challenge dose, eight of 20 animals in the test substance-treated group exhibited a positive response at the 24-hour scoring and ten exhibited a positive response at the 48-hour scoring, resulting in an incidence index of 50% and a severity index of 1.10 at the 48-hour scoring interval. Of the eight animals which had positive

scores at the 24-hour scoring interval, all continued to exhibit positive scores of the same or increased severity at 48 hours. In the vehicle control group following the second challenge, one of ten animals had a positive response at both the 24- and 48-hour scoring intervals, resulting in an incidence index of 10% and a severity index of 0.20. No positive reactions were observed at the vehicle challenge site (right flank) in any animal for all groups during the study.

C. Body Weights: A summary of mean body weights is presented in Table 2. Individual body weights are given in Appendix 4. All animals gained weight during the study.

IV. CONCLUSIONS

All positive control animals exhibited a positive response (*i.e.*, erythema and/or edema scores greater than 1) during the study, therefore, the test system was considered valid. A positive response in the test substance-treated animals following the second challenge dose resulted in incidence and severity indices of 50% and 1.10, respectively, at the 48-hour scoring interval. According to the modified scoring rating of Kligman, Dow Corning® 3-8015 Intermediate (Platinum #2) is considered a moderate skin sensitizer in guinea pigs.

V. TABLES

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

TABLE 1

Summary of Incidence and Severity Indices After First Challenge

	Treated Group 24 hours	48 hours
Incidence[a] index		
Left side	2/20 (10%)	10/20 (50%)
Right side	0/20 (0%)	0/20 (0%)
Severity[b] index		
Left side	2/20 (0.10)	16/20 (0.80)
Right side	0/20 (0)	0/20 (0)

	Vehicle Control Group 24 hours	48 hours
Incidence index		
Left side	0/10 (0%)	1/10 (10%)
Right side	0/10 (0%)	0/10 (0%)
Severity index		
Left side	0/10 (0)	2/10 (0.20)
Right side	0/10 (0)	0/10 (0)

	Positive Control Group 24 hours	48 hours
Incidence index		
Left side	10/10 (100%)	10/10 (100%)
Right side	0/10 (0%)	0/10 (0%)
Severity index		
Left side	31/10 (3.10)	34/10 (3.40)
Right side	0/10 (0)	0/10 (0)

[a] Number of animals showing a positive score (erythema and/or edema response of 1 or greater) at that site ÷ total number of animals in the group x 100.

[b] Sum of the erythema scores for the site ÷ total number of animals in the group.

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

TABLE 1 (cont.)

Summary of Incidence and Severity Indices After Second Challenge

	Treated Group 24 hours	48 hours
Incidence[a] index		
Left side	8/20 (40%)	10/20 (50%)
Right side	0/20 (0%)	0/20 (0%)
Severity[b] index		
Left side	18/20 (0.90)	22/20 (1.10)
Right side	0/20 (0)	0/20 (0)

	Vehicle Control Group 24 hours	48 hours
Incidence index		
Left side	1/10 (10%)	1/10 (10%)
Right side	0/10 (0%)	0/10 (0%)
Severity index		
Left side	2/10 (0.20)	2/10 (0.20)
Right side	0/10 (0)	0/10 (0)

[a] Number of animals showing a positive score (erythema and/or edema response of 1 or greater) at that site ÷ total number of animals in the group x 100.

[b] Sum of the erythema scores for the site ÷ total number of animals in the group.

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

TABLE 2

Summary of Mean Body Weights (g)

		Week 0	Week 1	Week 2	Week 3	Week 4	Gain[a]
Test Substance-Treated	Mean	418	469	503	563	582	164
	Std. Dev.	34.5	46.0	47.8	52.6	54.6	28.7
	N[b]	20	20	20	20	20	20
Vehicle Control	Mean	393	442	478	533	555	163
	Std. Dev.	17.0	19.5	22.2	29.1	34.1	22.8
	N	10	10	10	10	10	10
Positive Control	Mean	387	436	451	508	--[c]	121
	Std. Dev.	23.7	26.1	28.1	32.1	--	16.1
	N	10	10	10	10	--	10

[a] Total Gain = Week 4 - Week 0 (except positive control, Week 3 - Week 0)
[b] N = number of animals
[c] Positive control animals not weighed

VI. APPENDICES

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 1

Scale for Scoring Skin Reactions

Evaluation of skin reactions

Erythema and eschar formation:	Score
No erythema	0
Very slight erythema (barely perceptible)	1
Well defined erythema	2
Moderate to severe erythema	3
Severe erythema (beet redness) to slight eschar formation (injuries in depth)	4

Edema formation:	Score
No edema	0
Very slight edema (barely perceptible)	1
Slight edema (edges of area well-defined by definite raising)	2
Moderate edema (raised approximately 1 mm)	3
Severe edema (raised more than 1 mm and extending beyond the area of exposure)	4

Draize, J.H. Appraisal of the Safety of Chemicals in Foods, Drugs, and Cosmetics, Assoc. Food and Drug Officials of the U.S., Austin, Texas, 1959.

Modified Scoring Rating for Allergic Potential

% of Animals Sensitized	Grades	Classification
5-10	I	Weak
11-30	II	Mild
31-60	III	Moderate
61-80	IV	Strong
81-100	V	Extreme

Kligman, A.M., "J. Invest. Dermatology," 1966.

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 2

Individual Erythema and Edema Scores After First Challenge

Animal Number	Test Substance Group 24 hr score Left[a]	Right[b]	48 hr score Left[a]	Right[b]	Animal Number	Vehicle Control Group 24 hr score Left[a]	Right[b]	48 hr score Left[a]	Right[b]	Animal Number	Positive Control Group 24 hr score Left[c]	Right[d]	48 hr score Left[c]	Right[d]
64	0/0[e]	0/0	0/0	0/0	54	0/0	0/0	2/0	0/0	84	3/0	0/0	4/0	0/0
65	0/0	0/0	0/0	0/0	55	0/0	0/0	0/0	0/0	85	3/1	0/0	3/0	0/0
66	0/0	0/0	2/0	0/0	56	0/0	0/0	0/0	0/0	86	4/0	0/0	4/0	0/0
67	0/0	0/0	0/0	0/0	57	0/0	0/0	0/0	0/0	87	3/0	0/0	4/0	0/0
68	1/0	0/0	1/0	0/0	58	0/0	0/0	0/0	0/0	88	3/0	0/0	3/0	0/0
69	0/0	0/0	1/0	0/0	59	0/0	0/0	0/0	0/0	89	3/0	0/0	3/0	0/0
70	0/0	0/0	0/0	0/0	60	0/0	0/0	0/0	0/0	90	3/0	0/0	4/0	0/0
71	1/0	0/0	3/0	0/0	61	0/0	0/0	0/0	0/0	91	3/0	0/0	3/0	0/0
72	0/0	0/0	2/0	0/0	62	0/0	0/0	0/0	0/0	92	3/0	0/0	3/0	0/0
73	0/0	0/0	0/0	0/0	63	0/0	0/0	0/0	0/0	93	3/1	0/0	3/0	0/0
74	0/0	0/0	0/0	0/0										
75	0/0	0/0	2/0	0/0										
76	0/0	0/0	0/0	0/0										
77	0/0	0/0	0/0	0/0										
78	0/0	0/0	1/0	0/0										
79	0/0	0/0	0/0	0/0										
80	0/0	0/0	2/0	0/0										
81	0/0	0/0	0/0	0/0										
82	0/0	0/0	1/0	0/0										
83	0/0	0/0	1/0	0/0										

[a] Left = left flank (test substance in vehicle)
[b] Right = right flank (vehicle only)
[c] Left = left flank (DNCB in propylene glycol)
[d] Right = right flank (propylene glycol only)
[e] Erythema/edema score

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 2 (cont.)

Individual Erythema and Edema Scores After Second Challenge

Animal Number	Test Substance Group				Animal Number	Vehicle Control Group			
	24 hr score		48 hr score			24 hr score		48 hr score	
	Left[a]	Right[b]	Left[a]	Right[b]		Left[a]	Right[b]	Left[a]	Right[b]
64	0/0[c]	0/0	1/0	0/0	54	2/0	0/0	2/0	0/0
65	1/0	0/0	1/0	0/0	55	0/0	0/0	0/0	0/0
66	3/0	0/0	3/0	0/0	56	0/0	0/0	0/0	0/0
67	0/0	0/0	2/0	0/0	57	0/0	0/0	0/0	0/0
68	1/0	0/0	2/0	0/0	58	0/0	0/0	0/0	0/0
69	0/0	0/0	0/0	0/0	59	0/0	0/0	0/0	0/0
70	0/0	0/0	0/0	0/0	60	0/0	0/0	0/0	0/0
71	3/0	0/0	3/0	0/0	61	0/0	0/0	0/0	0/0
72	2/0	0/0	2/0	0/0	62	0/0	0/0	0/0	0/0
73	0/0	0/0	0/0	0/0	63	0/0	0/0	0/0	0/0
74	0/0	0/0	0/0	0/0					
75	3/0	0/0	3/0	0/0					
76	0/0	0/0	0/0	0/0					
77	0/0	0/0	0/0	0/0					
78	2/0	0/0	2/0	0/0					
79	0/0	0/0	0/0	0/0					
80	3/0	0/0	3/0	0/0					
81	0/0	0/0	0/0	0/0					
82	0/0	0/0	0/0	0/0					
83	0/0	0/0	0/0	0/0					

[a] Left = left flank (test substance in vehicle)
[b] Right = right flank (vehicle only)
[c] Left = left flank (DNCB in propylene glycol)
[d] Right = right flank (propylene glycol only)
[e] Erythema/edema score

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 3

Summary of Preliminary Testing (Topical)

Temporary Animal No.	Test Substance Concentration (w/v)	Vehicle	Erythema Score 24 hr	Erythema Score 48 hr
241	100%	--	0	0
	75%	DC 360 Medical Fluid	0	0
	50%	DC 360 Medical Fluid	0	0
	25%	DC 360 Medical Fluid	0	0
242	100%	--	0	0
	75%	DC 360 Medical Fluid	0	0
	50%	DC 360 Medical Fluid	0	0
	25%	DC 360 Medical Fluid	0	0
243	100%	--	0	0
	75%	DC 360 Medical Fluid	0	0
	50%	DC 360 Medical Fluid	0	0
	25%	DC 360 Medical Fluid	0	0

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 4

Individual Body Weights (g)

Treated

Animal No.	Week 0	Week 1	Week 2	Week 3	Week 4	Gain[a]
64	468	531	574	613	654	186
65	403	451	510	574	602	199
66	393	428	468	522	537	144
67	468	540	585	662	688	220
68	423	475	504	542	569	146
69	386	421	448	518	551	165
70	448	514	558	617	643	195
71	405	459	498	548	554	149
72	429	479	501	588	583	154
73	403	455	498	567	578	175
74	429	510	542	629	657	228
75	466	533	568	617	637	171
76	342	371	413	454	476	134
77	387	424	463	522	539	152
78	452	502	527	580	601	149
79	410	452	476	532	550	140
80	373	415	427	471	493	120
81	390	427	466	532	550	160
82	443	489	524	584	585	142
83	440	495	506	578	587	147

[a] Gain = (Body Weight, Week 4 - Body Weight, Week 0)

SKIN SENSITIZATION STUDY OF DOW CORNING® 3-8015 INTERMEDIATE (PLATINUM #2) USING THE GUINEA PIG MAXIMIZATION TEST (GPMT)

APPENDIX 4 (cont.)

Individual Body Weights (g)

Vehicle Control

Animal No.	Week 0	Week 1	Week 2	Week 3	Week 4	Gain[a]
54	400	443	467	524	554	154
55	413	469	511	579	594	181
56	360	412	445	496	506	146
57	374	413	446	500	512	138
58	396	432	464	509	534	138
59	391	437	477	513	530	139
60	382	440	481	546	580	198
61	404	451	493	545	572	168
62	414	468	497	572	606	192
63	393	451	496	546	565	172

[a] Gain = (Body Weight, Week 4 - Body Weight, Week 0)

Positive Control

Animal No.	Week 0	Week 1	Week 2	Week 3	Gain[b]
84	343	390	417	458	115
85	383	440	453	509	126
86	375	437	473	522	147
87	411	457	455	530	119
88	386	439	451	518	132
89	373	425	432	480	107
90	426	475	495	557	131
91	401	434	450	498	97
92	389	462	478	541	152
93	364	401	402	468	104

[b] Gain = (Body Weight, Week 3 - Body Weight, Week 0)

APPENDIX 5
PROTOCOL DEVIATION

IITRI Project No. L08573-24

DCC Study No. 8445

Protocol Deviation No. 1

Study Title: Skin Sensitization Study of Dow Corning® 3-8015 Intermediate (Platinum 2) Using the Guinea Pig Maximization Test (GPMT)

10.h. Environmental Control: During the treatment phase of the study, the relative humidity ranged from 25 to 72%.

This deviation did not affect the integrity of the study.

John Findlay 8/7/96

John Findlay, B.S. Date
Study Director

APPENDIX 5 (cont.)

PROTOCOL DEVIATION

IITRI Project No. L08573 - 24

DCC Study No. 8445

Protocol Deviation No. 2

Study Title: Skin Sensitization Study of Dow Corning® 3-8015 Intermediate (Platinum #2) Using the Guinea Pig Maximization Test (GPMT)

11.f. Experimental Design: In some cases the lower flanks of the guinea pigs could not be used for the second challenge site due to a shaving abrasion or skin blemishes. Therefore, the upper flank was used. In all cases, naive skin was used for the challenge dose application.

This deviation did not affect the integrity of the study.

John Findlay 10/17/96

John Findlay, B.S. Date
Study Director